WE CLAIM:

1. A method of selecting a handover parameter in a cellular network, said method comprising the steps of:

measuring a delay of a handover procedure; and setting said handover parameter based on the result of said measurement step.

- 2. The method according to claim 1, wherein said measuring step comprises measuring said delay of said handover parameter and wherein said handover parameter comprises a hysteresis value for a handover threshold.
- 3. The method according to claim 1, wherein said measuring step comprises measuring said delay of said handover parameter and wherein said handover parameter comprises a length of an averaging window used for measuring transmission quality of a radio connection.
- 4. The method according to claim 1, wherein said measuring step comprises measuring said delay of said handover parameter and wherein said handover delay comprises at least one of a round trip delay of a physical layer protocol signaling, a delay between a radio network controlling device and a base station device, a measurement delay at a terminal device, and a processing delay of said cellular network.
- 5. The method according to claim 4, wherein said measuring step comprises measuring said handover delay comprising said physical layer protocol and wherein said physical layer protocol comprises a radio resource control protocol.

- 6. The method according to claim 1, wherein said setting step comprises setting said handover parameter and wherein said handover parameter is tuned dynamically based on the result of said measuring step.
- 7. The method according to claim 1, further comprising the step of comparing the result of said measuring step with a predetermined threshold.
- 8. The method according to claim 7, wherein said comparing step comprises said predetermined threshold corresponding to a hysteresis value of at least approximately 200ms.
- 9. The method according to claim 7, wherein said setting step further comprises the steps of setting said handover parameter to a first value when said measured handover delay is smaller than said predetermined threshold, and setting said handover parameter to a second value when said measured handover delay is not smaller than said predetermined threshold.
- 10. The method according claim 1, wherein said measuring step comprises measuring an acknowledged mode round trip delay and estimating a peer-to-peer signaling delay based on the measured round trip delay.
- 11. The method according to claim 10, wherein said measuring step is based on a counting operation for counting time stamps.
- 12. The method according to claim 1, wherein said measuring step comprises calculating or deducing said delay from a standard protocol message by using a common time reference.
- 13. The method according to claim 1, wherein said measuring step comprises measuring an uplink delay based on an event report propagation

time using time stamps, and measuring a downlink delay based on a physical channel reconfiguration message.

14. A network device for selecting a handover parameter in a cellular network, said device comprising:

measuring means for measuring a delay of a handover procedure; and setting means for setting said handover parameter in response to said measuring means.

- 15. The device according to claim 14, wherein said handover delay comprises at least one of a round trip delay of a physical layer protocol signaling, a delay between a radio network controlling device and a base station device, a measuring delay at a terminal device, and a processing delay of said cellular network.
- 16. The device according to claim 15, wherein said physical layer protocol is a radio resource control protocol.
- 17. The device according to claim 14, wherein said handover parameter is a hysteresis value for a handover threshold.
- 18. The device according to claim 14, wherein said handover parameter is a length of an averaging window used for measuring transmission quality of a radio connection.
- 19. The device according to claim 14, wherein said measuring means is arranged to derive said delay from an acknowledged mode signaling from a radio network controller to a terminal device to be handed over.

- 20. The device according to claim 14, wherein said measuring means is arranged to calculate or deduce said delay from a standard protocol message.
- 21. The device according to claim 20, wherein said measuring means is arranged to use a common time reference for calculating or deducing said handover delay.
- 22. The device according to claim 14, wherein said measuring means is arranged to measure an uplink delay based on an event report propagation time, and to measure a downlink delay based on a physical channel reconfiguration message.
- 23. The device according to claim 19, wherein said measuring means comprises a frame counter for keeping a time stamp.
- 24. The device according to claim 14, wherein said network device is a device responsible for handover in said cellular network.
- 25. The device according to claim 24, wherein said network device is a radio network controller.
- 26. A network device for selecting a handover parameter in a cellular network, said device comprising:

a measuring unit for measuring a delay of a handover procedure; and a selection unit for setting said handover parameter in response to said measuring unit.

27. The device according to claim 26, wherein said selection unit comprises a hysteresis selection unit.